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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/532,079	04/21/2005	Jacek Marczyk	JACCSE	6206		
75	90 06/27/2006		EXAMINER			
Pisner & Pisne 12111 Fairfax H		STARKS, WILBERT L				
Fairfax, VA 22030			ART UNIT	PAPER NUMBER		
			2129			
			DATE MAILED: 06/27/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)					
Office Action Summary		10/532,079		MARCZYK, JACEK					
		Examiner		Art Unit					
		Wilbert L. Starks, Jr.		2129					
Period fo	The MAILING DATE of this communication a or Reply	ppears on the cover she	et with the c	orrespondence ac	ldress				
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. The period for reply is specified above, the maximum statutory perion the to reply within the set or extended period for reply will, by state the period by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMM 1.136(a). In no event, however, n d will apply and will expire SIX (6 tte, cause the application to become	UNICATION nay a reply be tin) MONTHS from me ABANDONE	N. nely filed the mailing date of this c D (35 U.S.C. § 133).					
Status									
1)⊠	Responsive to communication(s) filed on 21	April 2005.							
·—	•	is action is non-final.							
3)□	Since this application is in condition for allow	ance except for formal	matters, pro	secution as to the	e merits is				
,—	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)⊠	☑ Claim(s) <u>1-6</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)[☐ Claim(s) is/are allowed.								
6)⊠	☑ Claim(s) <u>1-6</u> is/are rejected.								
7)	Claim(s) is/are objected to.								
8)□	8) Claim(s) are subject to restriction and/or election requirement.								
Applicati	on Papers								
9)[The specification is objected to by the Exami	ner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.									
	Applicant may not request that any objection to the	e drawing(s) be held in at	eyance. Se	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	nder 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:									
	1. Certified copies of the priority documents have been received.								
	 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 								
	application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.									
		·							
Attachmen	t(s)								
	e of References Cited (PTO-892)		iew Summary						
	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0		Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)						
	r No(s)/Mail Date	~,	r:	•	·				

DETAILED ACTION

Claim Rejections - 35 U.S.C. §101

1. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-6 is directed to non-statutory subject matter.

2. Regardless of whether any of the claims are in the technological arts, none of them is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 U.S.C. §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "input variables" references are just such abstract ideas.

3. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

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Today we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result" — a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades. (emphasis added) State Street Bank at 1601.

- 4. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se statutory*. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."
- 5. The court was being very specific.
- 6. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and <u>relied upon</u> by regulatory authorities and in subsequent <u>trades</u>." (i.e. the trading activity is the <u>further practical use</u> of the real world <u>monetary</u> data beyond the transformation in the computer i.e., "post-processing activity".)

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7. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

8. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[The dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation. In re Warmerdam 31 USPQ2d at 1759 (emphasis added).

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9. Since the Federal Circuit held in *Warmerdam* that this is the "dispositive issue" when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is "useful, concrete, and tangible" in similar cases.

Accordingly, the Examiner finds that Applicant manipulated a set of abstract "input variables" to solve purely algorithmic problems in the abstract (i.e., what *kind* of "input variable" is used? Heart rhythm data? Algebraic equations? Boolean logic problems? Fuzzy logic algorithms? Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations thereof?) Clearly, a claim for manipulation of "input variables" is provably even more abstract (and thereby less limited in practical application) than pure "mathematical algorithms" which the Supreme Court has held are <u>per se</u> nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.

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- 10. Since the claims are not limited to <u>exclude</u> such abstractions, the broadest reasonable interpretation of the claim limitations <u>includes</u> such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. §101 doctrine.
- 11. Since Warmerdam is within the Alappat-State Street Bank line of cases, it takes the same view of "useful, concrete, and tangible" the Federal Circuit applied in State Street Bank. Therefore, under State Street Bank, this could not be a "useful, concrete and tangible result". There is only manipulation of abstract ideas.

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12. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T*Corp. v. Excel Communications, Inc. decision. The Court reminded us that:

Finally, the decision in In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. *** The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that 'taking several abstract ideas and manipulating them together adds nothing to the basic equation'; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court's conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) AT&T Corp. v. Excel Communications, Inc., 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

- 13. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the "useful, concrete, and tangible" nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.
- 14. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicant's phrase "input variable" is simply an abstract construct that does not provide <u>limitations</u> in the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under *AT&T*, *State Street* and *Warmerdam*, is straightforward and clear. The claims take several abstract ideas (i.e., "input variables" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-6 are, thereby, rejected under 35 U.S.C. §101.

Claim Rejections - 35 U.S.C. §112

The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

("The how to use prong of section 112 incorporates as a matter of law the requirement of 35 U.S.C. §101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. §101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. §112."); In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, otherwise an applicant would anomalously be required to teach how to use a useless invention.") See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-6 are rejected on this basis.

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

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A. Ulyanov et al. (U.S. Patent Number 6,950,712 B2; dated 20050927; class 700; subclass 028) discloses a system and method for nonlinear dynamic control based on soft computing with discrete constraints.

- B. Agrafiotis et al. (U.S. Patent Number 6,421,612 B1; dated 20020716; class 702; subclass 019) discloses a system, method and computer program product for identifying chemical compounds having desired properties.
- C. Klimasauskas (U.S. Patent Number 6,110,214 A; dated 20000829; class 703; subclass 002) discloses an analyzer for modeling and optimizing maintenance operations.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

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25 June 2006

Wilbert L. Starks, Jr.

Wilbert Examiner

Primary

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